

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/583,729 05/31/00 OMI

K 106330

EXAMINER

MM91/0404

ART UNIT	PAPER NUMBER
----------	--------------

2834
DATE MAILED:

04/04/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/583,729	Applicant(s) Omi
Examiner Burton S. Mullins	Group Art Unit 2834

Responsive to communication(s) filed on _____.

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1 and 2 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1 and 2 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152


BURTON S. MULLINS
PRIMARY EXAMINER

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: p.4, lines 9-10, recitation "is come through;" p.4, lines 22-23, recitation "...is mounted by pressing and sticking working...;" p.5, line 7, recitation "oriented air;" p.5, lines 18-24, recitation "With this clearance...in a condition of contacting to the shaft 11 two ball bearings can be displaced... therefore, the coaxiality of the ball bearings is increased."

Claim Objections

3. Claims 1-2 are objected to because of the following informalities: In claims 1-2, recitation "...a shaft supported by bearings rotatably..." should be changed to --a shaft supported rotatably by bearings--. On line 4 in claims 1-2, change "...are made to be rotated..." to --rotate--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 1-2, recitation "two ball bearings width of inner races of which is smaller than the width of outer races are inserted from one side" is vague, indefinite, confusing language. Does "width" refer to width in the axial or radial direction? In claim 2, recitation "...and one inner races of the two ball bearings are pushed with a spring..." is indefinite and confusing language.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wrobel (US 5274289) in view of Itsu (US 5128571). Wrobel teaches the basic fan motor structure including a shaft 14 supported by ball bearings 12a in plastic bearing box 11a; a ring magnet 13a; and a stator 11 with windings (not numbered) supplied with current. The ball bearings are inserted from one side and secured by clip 20. One bearing is pushed by spring 5 toward the other bearing.

Wrobel does not teach that the outer race of each bearing is axially longer than the inner race.

Itsu teaches a hard-disk motor which includes two ball bearings 19. The inner races 15 are each smaller in axial length than the outer race 16 (Fig.1). This construction provides a smaller diameter motor since it reduces the distance between the shaft and the inner wall of the armature winding 11 (c.2, lines 20-25).

It would have been obvious to modify Wrobel and provide ball bearings wherein the inner races are smaller in axial length than the outer race per Itsu since it would have been desirable to reduce the size of the motor.

Regarding claim 2, the spring 5 in Wrobel would bear upon the inner race of the bearing of Itsu since the spring is located on the periphery of shaft 14.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is (703) 305-7063.

bsm

March 30, 2001



BURTON S. MULLINS
PRIMARY EXAMINER